

FRONT-SIDE REPAIRABLE TFT-LCD AND METHOD FOR MAKING

Abstract of the Disclosure

5 A front-side repairable TFT-LCD assembly and a method for fabricating such repairable assembly are disclosed. In the assembly, at least one repair line that is positioned outside of and in parallel with a circuitry on the TFT-LCD is first laid out, while a black matrix film is coated on a glass substrate and patterned/formed with a multiplicity of apertures by a photolithographic/etching method. The multiplicity of apertures allows a repair laser to go through the apertures for effectuating a repair on a gate busline or on a data busline at a cross-over point with a repair line. The present invention further discloses a method for repairing a front-side repairable TFT-LCD assembly by first providing a front-side repairable assembly, then testing the assembly to locate defective circuit in a circuitry, and then irradiating a laser beam through a multiplicity of apertures in the black matrix film coated inside the LCD assembly to carry out a repair on the at least one defective circuit.